IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of	:	**Confirmation No. 1112**
Edwin Southern	:	Attorney Docket No. 2004_0200
Serial No. 10/772,467	:	Group Art Unit 1645
Filed February 6, 2004	:	Examiner A. Skibinsky
ANALYZING POLYNUCLEOTIDE SEQUENCES	:	**Mail Stop: AF**

SUPPLEMENTAL RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is further to Applicant's response dated November 20, 2007.

On pages 7-8 of the Office Action, in section 18, the Examiner argues: "Stavrianopoulos *et al.* teaches treatment of the array with a silane linker (the amma*[sic]*-aminopropyltriethoxysilane of Example 1) for covalent attachment of DNA."

As pointed out in Applicant's previous response, the examiner's interpretation of Stavrianopoulos is incorrect. Stavrianopoulos mentions the use of silanes, but these specific linkers result in ionic bonding of DNA rather than covalent bonding.

Example 1 in Stavrianopoulos does treat glass with γ-amino-propyl-triethoxy-silane (col. 8, lines 23*ff*), but this silane is used for ionic bonding of nucleotides. The silane becomes attached to the glass surface and its amino group is left outward-facing. Thus the surface becomes covered in amino groups, which are protonated to leave multiple positively-charged amine groups exposed on the surface. The amine is linked via the silane's propyl group down to the silicon region of the surface. This situation is confirmed at lines 32-35: "The resulting treated glass surface will now have available